VII. *Obſervations of the* Aurora Borealis *made in* England *by* Andr. Celſius, *F. R. S. and Secr. R S. of* Upſal *in* Sweden.

SEPT. 13, 1735, in the Town of *Woodford*, ſix Miles to the North Eaſt of *London*, at 11 ½ h. at Night, there appear'd a bright Band, almoſt parallel to the Horizon; and its Middle was judged to be under η of the Great Bear. At Times another Light ſhot along the Great Bear; but almoſt conſtantly cover'd the Stars γ and δ.

Octob. 4, in *King-ſtreet, Bloomsbury*,

	h	*'*	*''*	
At	9	22	0	p. m. A Ray or Streamof Light appear'd under the Polar Star perpendicular to the Horizon.
	9	24	13	That Ray diſappear'd.
	9	27	6	Two perpendicular Rays ſhot forth five or ſix Degrees from the North towards the Eaſt.
	9	28	30	A whitiſh Ray again exactly under the Polar Star.
	9	30	0	That Ray moved Weſtward.
	9	31	0	'Twas ſeen under η of the Great Bear.
	9	31	27	It entirely diſappear'd.
	9	36	8	A Ray aſcending perpendicularly by the Polar Star, and α and β of the Great Bear.
	9	40	0	The Ray ſeem'd to move gradually under ξ of the Great Bear.

No

	h	′	″	
At	9	44	0	No more Rays appeared. But whether there were any Remains of Light near the Horizon, or in the Weſt, I could not ſee, upon account of the neighbouring Houſes.

Octob. 11, in *London.*

	h	′	
At	10	37	p. m. There were two bright Rays under ζ and ε of the Great Bear.
	10	39	A Ray between ε of the Great Bear and the Polar Star.
	10	39 ½	A Ray in Form of a Pyramid above η of the Great Bear.
			Theſe Rays had not any Motion parallel to the Horizon ; but they
	10	43	entirely diſappear'd.

Jan. 11, 173⅚ in *London.*

At	10.	0.	p. m. An indifferently bright Arch, pale towards the Edges, appear'd 16 Degrees high : One of the Ends of which deſcended Eaſtward under η of the Great Bear : And lucid Streaks appear'd now and then over this Arch.
	11	13	Under this Arch was another very bright Tract parallel to it, five Degrees above the Horizon ; in which Tract there were Rays, that ſhot from Weſt towards the Eaſt.
	11	15	This Arch was very faint.

The

	h	′	
At	11	17	The firſt Arch became brighter, and the lower Arch was almoſt blended with the upper, and broken in the middle.
	11	20	The whole Arch was beſet with faint Rays.
	11	21	One of the Rays under the Polar Star.
	11	27	No Arch, nor Rays, but bright Tracts diſperſed here and there.
	11	36	The Light reached up to the Polar Star, and ſomewhat higher.
	11	44	A lucid Ray under the Polar Star.
	12	11	The Sky was overcaſt with Clouds, except one lucid Streak, which appear'd three or four Degrees to the Eaſt of the North.

February 16, in *Clare-Hall, Cambridge*,

At a Quarter paſt Eight in the Evening, the Moon ſhining very bright, there appear'd two perpendicular Streams betweenthe great and little Bear

April 3, in *London*,

	h	′	
At	8	46	I obſerved a lucid Arch one Degree broad, which extended along the Northern Crown, the *Cingulum Boötis*, the *Coma Berenices*, the

leſſer Lion and Cancer, as far as the ſmaller Dog.

h ′ ″

At 8 49 36. This Arch quite diſappear'd: But at the ſame time, I ſaw another broader and brighter Arch under *Caſſiopea*, ſeven or eight Degrees high.

In the Obſervations of *October* 4th, and in the laſt, I am certain as to the Time of the Clock: So that if it has happen'd that others have obſerved the ſame *Phænomena*, the Longitudes of Places may be determined by them with greater Exactneſs than by the Satellites of *Jupiter*, which I take to be the principal Uſe that may be made of theſe Obſervations, eſpecially in making Maps of the Northern Countries, where theſe Lights more frequently occur.

VIII. *A Letter from Dr.* Robert James, *of* Lichfield, *to Sir* Hans Sloane, *Bart. Pr. R. S. containing ſome Experiments made upon* Mad Dogs *with* Mercury.

Lichfield, June 3, 1735.

SIR,

IN purſuance of your Commands, I here give you an Account of ſome Experiments that have been made upon *Mad Dogs* with *Mercury*, which I apprehend I have ſome Reaſon to believe is the